

6061-T6

2" X 3.500"

## Work Order ID 78613

\*78613\*

Page 1

Item ID: D4103-1

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Step / Handle

Start Date: 11/01/2012 Start Qty: 6.00

\*6\*

Cust Item ID:

Required Date: 25/01/2012 Req'd Qty: 6.00

\*6\*

Customer:

Reference:

Approvals:

Process Plan: M.C.J

Date: 12/01/11

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D4103

A

100

Cut blanks as per folio

0.00

\*100\*

Bandsaw

Memo

0.00

Jeaspa Bandsaw

6.200" long

6 0 12/03/25

110

0.00

\*110\*

HAAS I

Memo

0.00

HAAS CNC vertical machine #1

Mill as per dwg and Folio FA937

DEBURR

6 0 12/03/26

120

QC2- Inspect parts off machine FAI/FAIB

0.00

\*120\*

QC

Memo

0.00

Quality Control

6 0 12/03/26

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**\*78613\***

Page 2

**\*N900040100\***

Setup Start \*NS1\*

Stop \*NS2\*

\*6\*

**Cust Item ID:**

\*6\*

**Customer:**

**Reference:**

Run Start \*NR1\*

Stop \*NR2\*

**Insp.  
Stamp**

0.00

**\*130\***

QC

## Memo

0.00

## Quality Control

140

Chemical Conversion Coat per QSI005 4.1

0.00

**\*140\***

HandFinish

## Memo

0.00

## Hand Finishing

150

### QC3- Inspect Part Finish

0.00

**\*150\***

QC

## Memo

0.00

## Quality Control

W/O:		WORK ORDER CHANGES					
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**NOTE:** Date & initial all entries

# Work Order ID 78613

**\*78613\***

Page 3

January-11-12 2:48:18 PM

Item ID: D4103-1 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Step / Handle  
 Start Date: 11/01/2012 Start Qty: 6.00 **\*6\*** Cust Item ID:  
 Required Date: 25/01/2012 Req'd Qty: 6.00 **\*6\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	Identify as per dwg & Stock Location: <u>126</u>	0.00							
<b>*160*</b>									
Packaging	Memo	0.00							
Packaging									
170	QC21- Final Inspection - Work Order Release	0.00							
<b>*170*</b>									
QC	Memo	0.00							
Quality Control									

MLJ 12/03/27  
 (6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

January-11-12 2:48:22 PM

Page 1

Work Order ID: 78613

\*78613\*

Parent Item: D4103-1

\*D4103-1\*

Parent Item Name: Step / Handle

Start Date: 11/01/2012

Required Date: 25/01/2012

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV: A NEW ISSUE 10-07-01 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B2.000X03.50 0		Purchased	No			100	f	18.1311	0.52	3.284211			

\*M6061T6B2 000X03 500\*

6061-T6 Bar 2.00 x 3.50

\*\*

3.125'

12/03/25

Location

Loc Qty

Loc Code

MAT009

18.1311

112764

0.7284

118182

11.4527

→ 118641

5.95

3.125'

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 78613
<b>Description:</b> Step/Handle		<b>Part Number:</b> D4103-1
<b>Inspection Dwg:</b> D4103	<b>Rev:</b> A	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
2.93	+/-0.030	2.9305	✓			
0.37	+/-0.030	0.3715	✓			
0.83	+/-0.030	0.830	✓			
Ø0.560	+/-0.010	0.5585	✓			
0.06 X 45°	+/-0.030 X +/-0.5°	0.085 X 45°	✓			
0.26	+/-0.030	0.253	✓			
0.33	+/-0.030	0.3365	✓			
R0.06	+/-0.030	R.060	✓			
1.78	+/-0.030	1.783	✓			
0.45	+/-0.030	0.4495	✓			
0.33	+/-0.030	0.336	✓			
0.75	+0.000/-0.030	0.7485	✓			
1.66	+/-0.030	1.6455	✓			
0.80	+/-0.030	0.785	✓			
1.07	+/-0.030	1.074	✓			
3.85	+/-0.030	3.850	✓			
0.03 X 45°	+/-0.030 X +/-0.5°	0.038 X 45°	✓			
0.31	+/-0.030	0.306	✓			
0.28	+/-0.030	0.280	✓			
0.030 Deep	+/-0.030	0.0285	✓			
6.00	+/-0.030	5.998	✓			
R0.27	+/-0.030	R.250	✓			
0.56	+/-0.030	0.5423	✓			
1.74	+/-0.030	1.7468	✓			
2.50	+/-0.030	2.498	✓			
Ø0.438	+0.006/-0.001	Ø.4425	✓			
Ø0.266	+0.006/-0.001	Ø.267	✓			
0.96	+/-0.030	0.953	✓			
0.26	+/-0.030	0.251	✓			
0.25	+/-0.030	0.245	✓			
2.25	+/-0.030	2.248	✓			
1.00	+/-0.030	1.000	✓			
0.20	+/-0.030	0.205	✓			
0.98	+/-0.030	0.975	✓			
0.32	+/-0.030	0.317	✓			
1.25	+/-0.030	1.256	✓			
R0.19	+/-0.030	R0.190	✓			

<b>Measured by:</b> <i>JS</i>	<b>Audited by:</b> <i>[Signature]</i>	<b>Preliminary Approval:</b>
<b>Date:</b> 12/03/26	<b>Date:</b> 12-03-26	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
A	10.10.07	New Issue	KJ <i>[Signature]</i>	<i>[Signature]</i>

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

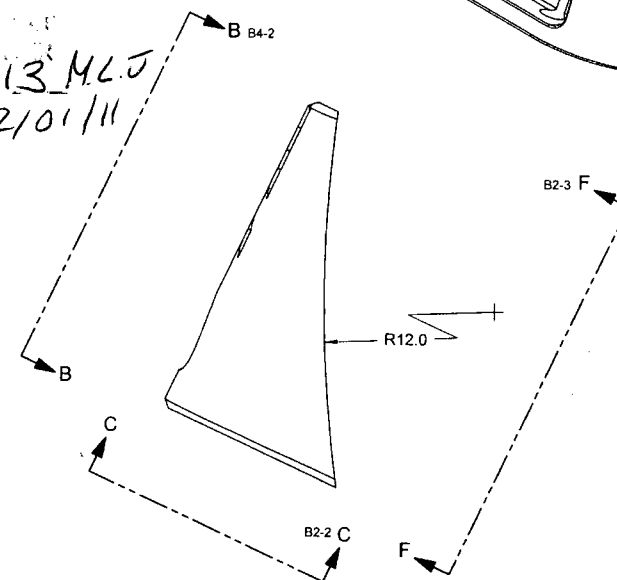
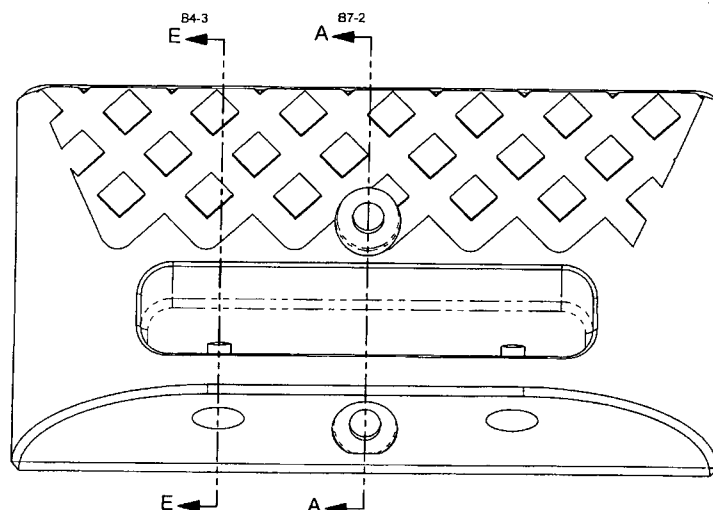
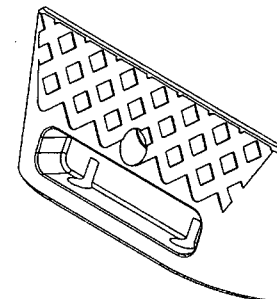
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NOTE: Date & initial all entries

SHOP COPY  
RETURN TO  
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UNCONTROLLED COPY  
SUBJECT TO ALL MODIFICATIONS

WITH CONCEPT  
WORK ORDER  
NO. 78613 M.L.J.  
12/01/11



# **D4103-1 STEP/HANDLE**

## **NOTES:**

- 1) MATERIAL: 6061-T6/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4103-1" USING FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: 0.81 lbs
- 8) MACHINE 0.28 x 0.31 GRIP 0.030 DEEP AT 45° PATTERN 0.25 APART

**RELEASED**  
2010-08-23  
JWB

A		NEW ISSUE		RF		10.05.17	
REV.		DESCRIPTION		BY		DATE	
DESIGN		RF		DART AEROSPACE LTD			
DRAWN		RF		HAWKESBURY, ONTARIO, CANADA			
CHECKED		<del>RF</del>		DRAWING NO.		REV. A	
MFG. APPR.		<del>RF</del>		D4103		SHEET 1 OF 3	
APPROVED		<del>RF</del>		TITLE		SCALE	
DE APPR.		<del>RF</del>		STEP/HANDLE		NTS	
DATE		10.05.17		COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.			

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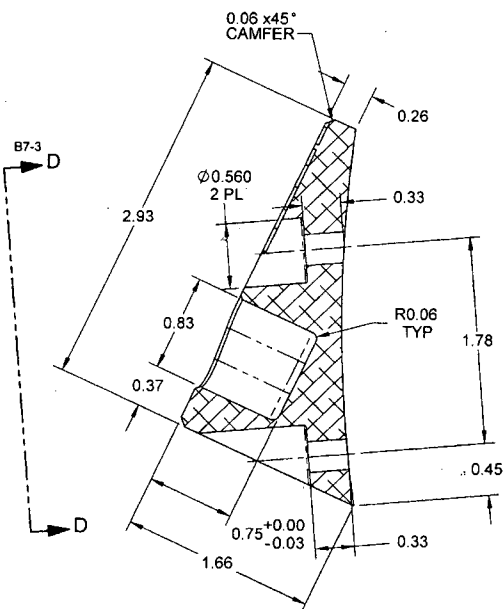
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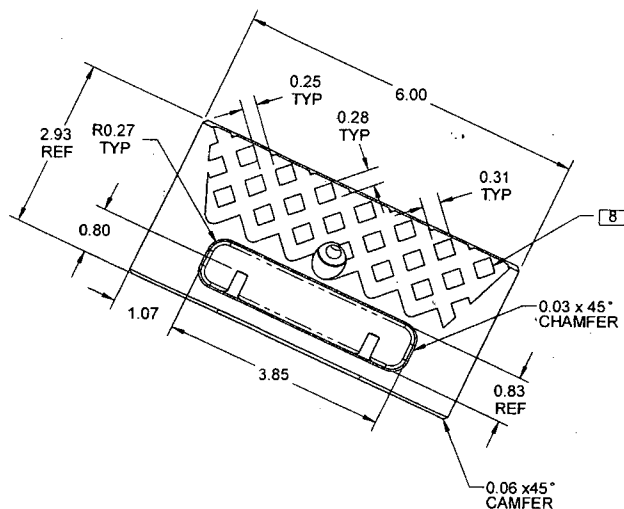
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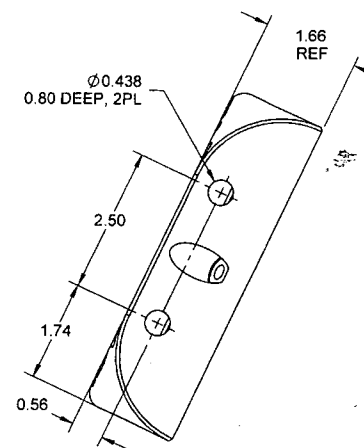
78613



**SECTION A-A** D6-1



**VIEW B-B** D3-1  
SCALE 0.5X



**VIEW C-C** B2-1  
SCALE 0.5X

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2010-08-23

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DRAWN	RF		
CHECKED	<i>[Signature]</i>	DRAWING NO. <b>D4103</b>	REV. A
MFG. APPR.	<i>[Signature]</i>	SHEET 2 OF 3	
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>STEP/HANDLE</b>	NTS
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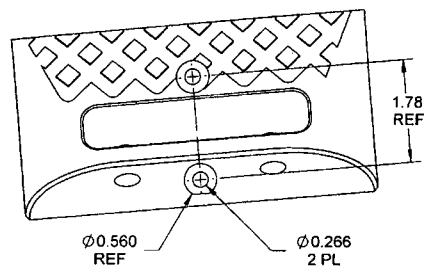
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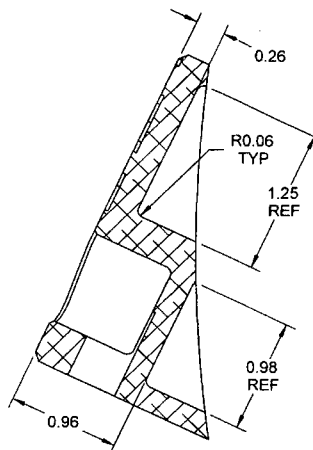
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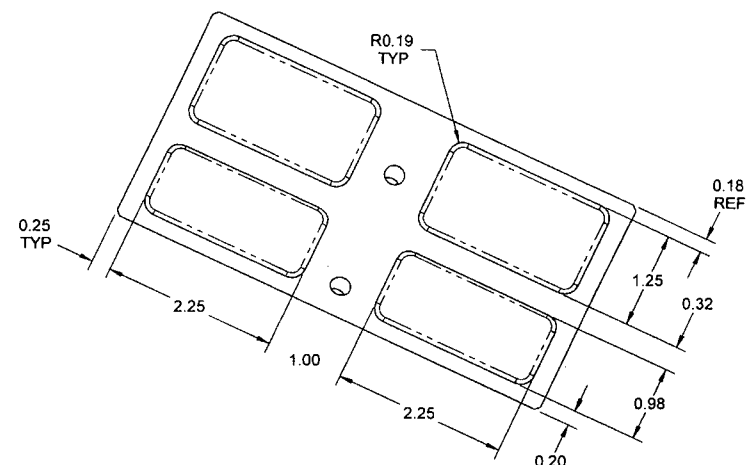
78613



VIEW D-D C8-2  
SCALE 0.5X



VIEW E-E D7-1



VIEW F-F C1-1

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DRAWN	RF		
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MFG. APPR.	RF		SHEET 3 OF 3
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